IV B. TECH I SEMESTER REGULAR EXAMINATIONS, NOVEMBER - 2023
DEVOPS
(INFORAMTION TECHNOLOGY)

Time: 3 hours   Max. Marks: 70

Note : Answer **ONE** question from each unit **(5 × 14 = 70 Marks)**
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UNIT-I

1. a) What is verification and validation? Discuss about Software [7M] Development Life Cycle?

    b) Describe V-Model, list and discuss about its applications. [7M]

(OR)

2. a) Explain the 12 Agile manifesto Principles. [7M]

    b) Describe Agile SDLC workflow, list out its benefits. [7M]

UNIT-II

3. a) Determine the differences between DevOps and Agile. When [7M] should we adopt DevOps?

    b) When and why should we invest in DevOps Orchestration? Give [7M] justification with example.

(OR)

4. a) List and explain the components of DevOps delivery pipeline. [7M]

    b) Name and describe build tools and deployment tools. List out the [7M] advantages of using these tools.

UNIT-III

5. a) Demonstrate the significant challenges to DevOps adoption. [7M] Explain how to overcome these challenges.

    b) Explain about DevOps adoption model. [7M]

(OR)

6. a) Analyze and illustrate DevOps adoption in projects to focus on [7M] technology and process aspects.

    b) Explain the alignment capabilities, what are the different [7M] capabilities and the need for alignment.

UNIT-IV

7. a) Explain about Continuous Delivery workflow. What is the need [7M] for CD.

    b) Describe the benefits of CI. Explain the key factors influencing [7M] the CI.

(OR)

8. a) Describe the continuous Integration and list out the advantages of [7M] CI in project development.

    b) Explain continuous delivery metrics. What are the key [7M] performance Indicators?

UNIT-V

9. a) Explain the stages of DevOps maturity model. [7M]
    b) Describe about the business benefits of DevOps maturity model. [7M]

(OR)

10. a) Discuss the key factors of DevOps maturity model. [7M]
    b) List and describe the DevOps maturity assessment factors. [7M]

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